# Arman Bishnoi

## EDUCATION

# Thapar Institute of Engineering And Technology

September 2021 - June 2025

Bachelor of Engineering in Computer Science (AI)

Patiala, Punjab

# Experience

## Cloud AI DevOps Intern

Jan 2025 – Jun 2025

Deloitte

Bengaluru

- Led cloud automation platform development Directed a 3-person team to build an enterprise cloud onboarding automation product, achieving 60% reduction in client infrastructure onboarding time and driving standardization across multiple projects.
- Architected comprehensive backend infrastructure Designed and developed the system using AWS Lambda (Python), Amazon RDS (PostgreSQL), and Amazon Cognito for authentication/RBAC, enabling project and environment creation with Dev/Pre-Prod/Prod layers and component-level configuration.
- Automated infrastructure provisioning workflows Implemented IP requirement calculation, CIDR allocation logic, automated subnet division and routing design for well-architected landing zones, plus automated Terraform code generation from S3-stored templates deployed via Jenkins CI/CD pipeline.

ThapaSat (ELC)

June 2023 - July 2023

Summer Intern

Patiala, Punjab

- Over 50 hours of satellite audio data were collected, capturing various frequencies used in weather transmissions.
- A signal processing algorithm was developed to convert over 100 audio files into images, achieving a 95% success rate in producing clear weather maps.
- Backend Python code was created for detecting cyclones from satellite images, processing 60 images per minute with 90% accuracy in predicting cyclonic paths up to 36 hours in advance.

# PROJECTS

## AWS Inventory System — AWS Lamda, DynamoDB

Code

- Developed AWS Lambda serverless solution to retrieve data from 20 AWS services, processing over 1500 records daily with 100% automation via AWS EventBridge scheduling and support for 50 concurrent executions without performance degradation.
- Implemented service-specific data storage across 20 separate DynamoDB tables, achieving 5ms average read/write latency
  and ensuring high availability and scalability of the entire system.
- Reduced manual audit time by 80% and increased data accuracy by 95% through automated resource tracking and management, eliminating manual data retrieval tasks.

#### Placed — Python, FastAPI, MongoDB

Code

- Built job aggregation platform using Flask with interactive dashboard featuring Plotly visualizations, multi-filter job search (experience level, skills), and automated data refresh capabilities through scheduled background processes
- Developed machine learning pipeline using scikit-learn RandomForestClassifier and TF-IDF vectorization to automatically classify job experience levels and extract technical skills from job descriptions with 1000+ feature extraction
- Implemented scalable job scraping and analysis system with modular architecture including ML-enhanced NLP processing, database storage layer, and RESTful API endpoints for real-time job data updates

## Landmark Detection — Python, PyTorch, Computer Vision

Code

- Built a deep learning model to detect facial landmarks using PyTorch and the 300-W dataset.
- Preprocessed input data with OpenCV, augmented training data, and used a custom CNN achieving high accuracy in keypoint localization.
- Evaluated model performance using Euclidean distance between predicted and ground truth landmarks and visualized results using Matplotlib.

### SKILLS

Programming Languages: Python, C++, SQL, HTML, CSS

Libraries and Tools: Scikit-learn, Pandas, NumPy, PyTorch, Power BI, AWS (S3, EC2, Lambda, DynamoDB), MongoDB Concepts: OOPs, Machine Learning, Computer Vision, Data Analysis, ETL Pipelines, Serverless Architecture, Cloud Automation Problem-Solving: Debugging, Optimizing Performance, Algorithm Design

Soft Skills: Collaboration, Communication, Analytical Thinking